

The Inhabitants of Oak Apples

By A. E. LE GROS

Dr Askew (1961) charted the inter-relationships between Cynipids and Chalcids to be found in oak apples, the bud galls of the Cynipid *Biorhiza pallida* Olivier. I commented (Le Gros 1963) on some of the other insects that pass part or all of their life history in these galls. This summer, as part of a study of the gall midges of oak, I had occasion to rear the inhabitant from twenty galls collected from Hayes Common, Kent, on 30th June. The twenty were selected from a number and were without emergence holes. Rearing took place in a glass jar, with a polythene bag tied over the opening.

The gall causer was the first to emerge, 72 females and 30 males, between 4-10 July. Surprisingly no specimens of the "guest" Cynipid *Synergus gallaepomiformis* B. de Fonscolombe which is nearly always present, emerged. Presumably they had been devastated by parasites, which appeared between 5-28 July. The first and most numerous species was *Torymus auratus* (Fourc.) (23 males, 17 females, 5-18 July) followed by *T. nigricornis* Boheman (14 females, 17-24 July) and *T. cingulatus* Nees (3 females, 20 July). Eight males which may have belonged to either of the last two species accompanied them. Finally between 24-28 July came *Mesopolobus jucundus* (Walker) (3 males, 17 females), *Eupelmus urozonus* Dalman (2 females) and *Megastigmus dorsalis* (Fab.) (2 males, 11 females).

On 8th July I noticed a pink mould on one of the galls and it spread rapidly, but did not prevent insects emerging. Between 5-11 July 15 beetle larvae and 2 small moth larvae left the galls to pupate in the soil.

When I first examined the galls on collection I had noted several reddish Cecidomyiid larvae in cavities on the surface of the gall near the point of attachment. On 18 July there were two male *Lestodiplosis* sp. flying in the polythene bag. This species, which Mr W. Nijveldt tells me is undescribed, is predatory on the larvae of another Cecid fly *Clinodiplosis biorhizae* Kieffer which is usually common in old galls from September onwards and feeds on the gall tissue. I was surprised to find the larvae so early on the galls, but as I have reared Cecids indistinguishable from the above mentioned pair on other decaying woody galls (*Andricus fecundator*, *A. kollari* and *A. inflator*) I suspect that *C. biorhizae* is polyphagous and has more than one generation a year and is followed by its predator.

Apart from these Cecids there are not many reports of diptera from these galls. Basden (1952, 1954) states that the fruit fly *Drosophila subobscura* Collin was twice recorded as bred from oak apples, in one case the galls were fermenting. I was surprised again therefore to see a pair of grey and black Muscids on 28 July. These were identified as *Anthomyia procellaris* Rondani by Mr A. C. Pont of the Brit. Mus. (Nat. His.). Some of the flies of this genus are known to be fungus eaters.

The eggs must have been laid before the mould developed, and it is possible that the fly larvae fed on the gall tissue.

There were no further emergences and on 24 October I broke the galls to fragments and found there were still a number of Chalcid larvae present. They were fully grown and would probably not pupate and emerge until the spring of 1972.

References

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Some Records of Grasshoppers (Acrididae) in S.W. Ireland

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During a fortnight's family holiday in West Cork from 23rd August to 5th September 1971, I had some limited opportunities to look for Orthoptera and make no apologies for publishing my somewhat scanty observations in view of the lack of attention which the Irish Orthoptera has received.

Although most of our excursions were made in the countryside around the village of Schull (where we stayed), we crossed into Co. Kerry on one occasion, 27th August, in order to visit Killarney. All four species I encountered are already well known from both the West Cork and North Kerry vice-counties (Kevan, 1961; Ragge, 1965), but it still seems worth listing the actual localities in which I found them. Incidentally, there are many bogs in the vicinity of Schull, Ballydehob and Skibbereen which looked suitable for the Large Marsh Grasshopper *Stethophyma grossum* (L.), a species already known to inhabit West Cork, but I was unable to search for it except in two likely bogs near Ballydehob. I visited these very briefly on a hot sunny morning, but failed to hear any stridulating males.

I also kept a sharp lookout in likely habitats for the Lesser Mottled Grasshopper. *Stenobothrus stigmaticus* (Rambur), recently discovered in the Isle of Man (Ragge, 1963; Burton, 1965), where I am familiar with it, but again without success.

Common Green Grasshopper, *Omocestus viridulus* L.: common almost everywhere in Counties Cork and Kerry. Recorded in the following localities:—

Schull: common in most, if not all, suitable places.